Application number 10/056,125
Amendment dated 6 November, 2006
Reply to Office Action of August 16, 2006

AMENDMENTS TO SPECIFCATION

Page 1, Title: rewrite title to read: **INTEGRATED PRICE AND VOLUME DISPLAY OF MARKET TRADED ~~INSTRUMENTS~~ SECURITIES USING PRICE-VOLUME BARS**

Abstract: A method and system for providing trading volume information of selected market traded ~~instruments~~ securities compiling aggregated volume of transactions executed within each pre-selected price bracket for each pre-selected discrete time interval. The data is displayed using price-volume bars incorporated into a price-volume chart. In this manner traders can compare the relative volume of transactions occurred at substantially narrow price brackets for each discrete time interval.

[0005] This invention relates to market traded ~~instruments~~ securities such as stocks, currency contracts, bonds, commodities and futures contracts, and more particularly to a charting system and computer implementation for displaying trading activity of those ~~instruments~~ securities by identifying the volume of transactions at each price bracket for each time interval within a price-time chart comprising a discrete number of price brackets and a discrete number of time intervals.

[0012] Financial market trading information is provided by the stock exchanges, ECNs, and a multitude of financial data providers. Typical data provided for executed transactions are time of sale, price of sale, and volume of such transaction. The ticker symbol, company or ~~instrument~~ security name, and date of transaction may be included in the data provided or is implicit in the data request. This individual transaction data is collectively known as "Time and Sales Data".

[0038] Accordingly, it is a primary object of my invention to provide market participants with a more complete market activity information on selected market traded ~~instruments~~ securities, compiling and displaying volume information in a per-price basis.

[0039] The advantage of my invention is to provide traders with trading volume information of selected ~~instruments~~ securities for each of pre-selected substantially narrow price brackets for each of pre-selected discrete time intervals, and display them in a graphical manner to convey a more accurate depiction of trading activity.

[0042] This data is compiled for each of a number of pre-selected price brackets for each of a number of pre-selected discrete time intervals. This is done by first separating all transactions executed during each time interval, and adding the total volume for each predetermined price bracket. The result is a table with 1 column for each time interval and 1 row for each price bracket, and each cell containing the total volume for each price bracket for each time interval. Each price bracket is either the minimum price increment/decrement allowed by the exchange where the ~~instrument~~ security is traded, or may be a fraction of the difference between the high and low price of the data set being

compiled. In the later case, determination of price brackets can be done either by simply dividing such difference or by using other mathematical formulae. In any case several price brackets should be determined to allow for a more refined data presentation.

[0061] It is a primary object of my invention to provide market participants with a more complete market activity information on selected market traded ~~instruments~~ securities, compiling and displaying volume information in a per-price basis.

[0062] The advantage of my invention is to provide traders with trading volume information of selected market-traded ~~instruments~~ securities for each of pre-selected substantially narrow price brackets for each of pre-selected discrete time intervals, and display them in a graphical manner to convey a more accurate depiction of trading activity.

[0064] For all subsequent description market ~~instrument~~ security is used to refer to market traded ~~instruments~~ securities such as stocks, currency contracts, bonds, and commodities, options, and futures contracts. Time and Sales Data comprising time, price, and volume of transactions is provided by exchanges, financial data providers, or ECNs. For all subsequent description the term "volume" refers to either number of shares traded, dollar amount of transactions, number of contracts traded, or open interest of futures and commodities, and the term "Time and Sales Data" will refer to transaction information as provided by exchanges or authorized data vendors, and comprising said time, price, and volume of individual transactions. Time and Sales Data can be received either in a data storage media or online through a suitable computer network connection from financial service providers or exchanges. Online data can be either "real-time" data or "delayed" data, as commonly defined and provided by the exchanges and vendors.

[0065] The Time and Sales Data online data feed can comprise information on one or more market ~~instruments~~ securities. Each market ~~instrument~~ security is referred to by its own unique ticker. For all subsequent description "ticker" is used to refer to a specific market ~~instrument~~ security, i.e. shares of a specific company. If information on more than one ticker received intermixed, the data needs to be first separated and stored by ticker.

[0068] b) Establish a set of price brackets compatible with available Time and Sales Data: Each price bracket being equal to or bigger than the minimum price increment/decrement allowed by the exchange where the market ~~instrument~~ security is traded and being substantially smaller than the difference between the highest and lowest transaction prices of said Time and Sales Data. This method of selecting price brackets should insure that most time intervals have transactions on at least two price brackets. Price brackets can be set by the user through a pre-defined user interface or use a preselected price brackets.